In Re Application Of: Brian P. Roarty | Examiner: Erin M. Boyd
Serial No.   10/797,255 | Group Art Unit: 3663
Filed: 03/10/2004 | Atty. Docket No:
For: Implementation… | Date: May 6th, 2009

RESPONSE TO OFFICE ACTION

This is in response to the Office Action mailed 11/07/2008. As this Office Action is subsequent to a restriction election, claims 04-10 are currently pending in this application and are addressed in this Response.

CLAIMS NOT INCLUDED IN OFFICE ACTION

Claim 11, and Claims 12-23 depending on it, were not included in the Office Action on the grounds that "Figure 6 does not show the optional third block of insulating material separating the first structural core and heat transference block, as recited in Claim 11". This assertion overlooked the fact that Claim 11 is a dependent claim of Claim 10, which in turn is a dependent claim of Claim 6, which in turn is a dependent claim of Claim 4.

Figure 6, described specifically in the Specification, details a "heat transference block 19 from which the energy passes into the fluid F". There is no limitation in Claim 11 (or any of its preceding claims) preventing that "heat transference block", item 19, from *also* being an insulating material sufficient to moderate the temperature created in the "means embedded within the nozzle for transferring energy into the fluid F and inducing a phase change in the fluid F", and thus protect those means from too sharp or destructive a thermal difference or from the excited or phase-changed, now gaseous yet formerly fluid, F, while transferring the energy from those means to the fluid F.

Alternative claims and drawings were filed to describe separate embodiments wherein the functional needs of heat transference and insulation would be better met by separate elements (see, e.g. Figure 2A, which has "the insulating layer 23 subdivided into multiple sub-layers having different insulating capacities (e.g. 23A, electrical; 23B, thermal) in order to limit both electrical and thermal energy transference between the structural core